

On page 25, line 5, kindly delete "(MEM" and insert --αMEM-- in place thereof.

On page 25, line 13, kindly delete "Millonigís" and insert --Millonig's-- in place thereof.

On page 26, line 16, kindly delete "H2O2" and insert --H<sub>2</sub>O<sub>2</sub>-- in place thereof.

On page 32, line 19, kindly delete "(MEM" and insert --αMEM-- in place thereof.

On page 34, line 16, kindly delete ", as described in Methods".

On page 36, kindly delete "(\_m)" immediately following "Wall width" and insert --(μm)-- in place thereof.

In the Claims

Kindly amend the following claims.

1. (amended) A method of [reducing the number of osteoblasts undergoing apoptosis in an individual] increasing the lifespan of osteoblasts in a bone-containing host in need of [such treatment] preventing bone loss or stimulating bone formation, comprising the step of: administering [a therapeutic dose of] therapeutically effective dosages of between approximately 10 and 1000 micrograms per kilogram body weight of isolated parathyroid fragment wherein said parathyroid fragment is [human] parathyroid hormone [[hPTH(1-34)]] (1-34), to said [individual] host [, wherein administration of human parathyroid hormone [hPTH(1-34)] results in a reduction in number of osteoblasts undergoing apoptosis, thereby preventing bone loss and/or stimulating bone formation in said individual].

2. (amended) The method of claim 1, wherein said [individual] bone-containing host is osteopenic.

3. (amended) The method of claim 1 wherein said [individual] bone-containing host is selected from the group consisting of [an individual] a bone-containing host currently being

Sub  
C<sub>1</sub>  
A<sup>1</sup>  
C<sub>24</sub>  
treated with one or more glucocorticoid compounds and [an individual] a bone-containing host  
[previously treated with one or more glucocorticoid compounds] experiencing adverse bone  
effects resulting from contact with one or more glucocorticoid compounds.

4. (amended) The method of claim 1, wherein said administration is selected from the  
group consisting of systemic, oral, intravenous, nasal spray and [inhallation] inhalation.

5. (amended) The method of claim 1, wherein said [human] parathyroid hormone  
fragment [[hPTH(1-34)]] is [administered in a dose of from about 10 µg/kg to about 1000 µg/kg  
a] human parathyroid fragment [hPTH(1-34)].

6. (amended) A method of screening for a compound that stimulates bone formation,  
comprising the steps of:

- (a) contacting osteoblasts cells with a test compound, wherein the osteoblast cells are  
selected from MLO-Y4, MC3T3-E1, MG-63, or other immortalized osteoblast cell line;
- (b) determining the number of [said] cells undergoing apoptosis; and
- (c) comparing the number of treated cells that are apoptotic [cells] with untreated  
osteoblast cells [that have not been contacted with said compound, wherein fewer apoptotic cells  
following contact with said compound than in the absence of said contact indicates that said  
compound inhibits apoptosis resulting in stimulation of bone formation].

7. (amended) The method of claim [6] 7, wherein said contacting of said osteoblast cells  
[is selected from the group consisting of *in-vitro* osteoblast cells and an] occurs in vivo in a  
murine animal model.

A<sup>2</sup>  
9. (amended) The method of claim [6] 7, further comprising, confirming [wherein said]  
stimulation of bone formation [is confirmed by] using methods selected from the group  
consisting of measuring BMD, measuring cancellous bone area, measuring cancellous bone

formation rate, measuring the number of osteoblasts per cancellous bone perimeter and measuring the number of osteocytes per bone area in said murine animal model following said contact with said compound compared with a murine animal model in the absence of said contact with said compound.

10. (amended) The method of claim 6, wherein [said determination of] apoptotic cells are identified using a technique [is] selected from the group consisting of microscopy of stained cells, TUNEL analysis, Hoescht 33258 dye analysis and video image analysis.

11. (amended) A method of screening for a compound that reduces bone loss, comprising the steps of:

- a2
- (a) treating osteoblast cells with a glucocorticoid;
  - (b) contacting said glucocorticoid-treated osteoblast cells with a test compound;
  - (c) determining the number of said osteoblast cells undergoing apoptosis; and
  - (d) comparing the number of apoptotic cells with osteoblast cells that have been treated with said glucocorticoid but were not contacted with said test compound, wherein fewer apoptotic cells following contact with said test compound than in the absence of said contact with said test compound indicates that said compound inhibits apoptosis of osteoblast cells thereby reducing bone loss.
- 112,2

12. (amended) The method of claim 11, wherein said contacting of said glucocorticoid-treated osteoblast cells occurs in vitro [is selected from the group consisting of *in vitro* osteoblast cells and an *in vivo* murine animal model].

13. (amended) The method of claim [12] 19, wherein said *in vivo* murine animal model is selected from the group consisting of a SAMP6 mouse and a SAMR1 mouse.

14. (amended) The method of claim 11, wherein [said determination of] apoptotic cells are identified using a technique [is] selected from the group consisting of microscopy of stained cells, TUNEL analysis, Hoescht 33258 analysis and video image analysis.

Kindly add the following claims.

15. (new) The method of claim 1, wherein said host is a human.

16. (new) The method of claim 5, wherein said host is a human.

17. (new) A method of evaluating whether a compound stimulates bone formation, comprising the steps of:

- (a) administering the test compound to a bone-containing host;
- (b) determining the number of osteoblast cells in the host undergoing apoptosis;
- (c) comparing the number of apoptotic osteoblast cells in the treated host with osteoblast cells in a control host that has not been treated with the test compound; and
- (d) determining whether the test compound reduces the apoptosis of the host osteoblast cells.

18. (new) The method of claim 17, wherein apoptotic cells are identified using a technique selected from the group consisting of microscopy of stained cells, TUNEL analysis, Hoescht 33258 dye analysis and video image analysis.

19. (new) The method of claim 11, wherein contacting of said glucocorticoid-treated osteoblast cells occurs in an *in vivo* murine animal model.

20. (new) The method of claim 1, wherein said parathyroid hormone fragment is a bovine parathyroid fragment [bPTH(1-34)].